



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,892	10/23/2006	Jean-Noel Thorel	128414	7353
25944 7590 10/14/2009 OLIFF & BERRIDGE, PLC P.O. BOX 320850 ALEXANDRIA, VA 22320-4850				
EXAMINER				
MILLIGAN, ADAM C				
ART UNIT		PAPER NUMBER		
1612				
MAIL DATE		DELIVERY MODE		
10/14/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/583,892

**Applicant(s)**

THOREL ET AL.

**Examiner**

ADAM MILLIGAN

**Art Unit**

1612

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 21, 23-32 and 34-39 is/are pending in the application.
- 4a) Of the above claim(s) 32, 34 and 35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21, 23-31, 36-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/55/003)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Paper No(s)/Mail Date \_\_\_\_\_
- 6) ☐ Notices of Informal Patent Application
- 7) ☐ Other: \_\_\_\_\_
- 8) ☐ Paper No(s)/Mail Date 1pg(11/14/2006) and 1pg(10/23/2006)

### **DETAILED ACTION**

Applicants' arguments and amendments, filed 6/4/2009, have been fully considered. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

#### ***Election/Restrictions***

In light of Brock (2003/0130636), the two distinct inventions, recited in claims 21 and 32, were demonstrated to lack unity of invention in the office action dated 3/4/2009, which was proper. It is noted that the claims were amended on 6/4/2009; however, even in light of the new claims, in view of the 103 rejection over Straub (U.S. 2002/0019431) and Farmer (WO 98/47374) below, amended claims 21 and 32 still lack unity of invention. While instant claims 21 and 32 do contain the common technical feature of xylitol, mannitol, rhamnose, and fructooligosaccharides, this common technical feature does not rise to the level of a special technical feature because it does not involve an inventive step over the prior art.

The requirement is still deemed proper and is therefore made FINAL.

#### ***Claim Rejections – 35 U.S.C. § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

**Claims 21, 36 and 39** are rejected under 35 U.S.C. 103(a) as being unpatentable over Straub (U.S. 2002/0019431) in view of Farmer (WO 98/47374).

Straub teaches a topical matrix, in the form of a cream or ointment, for delivery an active ingredient (¶14). The matrix includes sugars such as mannitol, xylitol, glucose, and rhamnose (¶29), as well as an emulsifier (¶ 53). In an example provided, the polyol content was about 38% (Example 1, ¶ 63).

Straub does not teach the addition of fructooligosaccharides (FOS).

Farmer teaches a topical formulation comprising a beneficial, probiotic bacteria such as Bacillus in combination with FOS (Claim 6). FOS supplies the beneficial bacteria with food to grow and replace any undesirable bacteria or pathogenic microorganisms because it is only utilizable by the beneficial bacteria (p.14, last ¶). The use of FOS provides a synergistic effect by increasing the effectiveness of the beneficial bacteria (p.15, 1<sup>st</sup> ¶). The active substance may be combined with a physiological carrier which is physiologically compatible with the skin (p.17, lines 18-23). Bacillus produces lactic acid as a by product (pg 3 lines 24-25)

Farmer does not teach the addition of mannitol, xylitol and rhamnose

It would have been obvious to modify the topical matrix of the primary reference by adding FOS to the compositions, given FOS promotes beneficial bacteria in order to replace undesirable bacteria and pathogenic microorganisms as taught by the secondary reference.

**Claim 23** is rejected under 35 U.S.C. 103(a) as being unpatentable over Straub (U.S. 2002/0019431) in view of Farmer (WO 98/47374), the combination further in view of Epstein (U.S. 5,885,593).

The combination of Straub and Farmer is discussed above, but does not teach the addition of cyclodextrins.

Epstein teaches a skin care composition comprising about 1-15% of an acid material and about 1-10% cyclodextrin, wherein the cyclodextrin reduces the skin irritation (claim 1).

Epstein doesn't teach does not teach the addition of rhamnose or fructooligosaccharides.

It would have been obvious to combine the topical matrix rendered obvious by Straub and Farmer with cyclodextrins in order to reduce skin irritation of the lactic acid byproduct taught by Farmer.

**Claims 24, 37 and 38** are rejected under 35 U.S.C. 103(a) as being unpatentable over Straub (U.S. 2002/0019431) in view of Farmer (WO 98/47374), the combination further in view of Carson (U.S. 6,391,324) and Knight (U.S. 6,017,549).

The combination of Straub and Farmer is discussed above, but does not teach the addition of glucose glutamate or cetearyl glucoside.

Carson teaches a topical skin care composition that contains glucose or a glucose compound such as glucose glutamate (Claim 3).

Carson does not teach the addition of cetearyl glucoside, xylitol, mannitol, rhamnose or fructooligosaccharides.

Knight teaches a topical pharmaceutical composition containing an emulsifying agent ceterayl glucoside in an amount of 0.5% to 10% (Claims 3 and 16). The oil component of the emulsion may be soybean oil (col. 3, line 55 – col. 4, line 17) and may be included at 7% by weight (col. 5, example 1).

Knight does not teach the addition of glucose glutamate, xylitol, mannitol, rhamnose or fructooligosaccharides.

It would have been obvious to modify the topical matrix rendered obvious by Straub and Farmer by substituting a known glucose substitute as taught by Carson and a known emulsifier as taught by Knight.

**Claims 25 and 27-31** are rejected under 35 U.S.C. 103(a) as being unpatentable over Straub (U.S. 2002/0019431) in view of Farmer (WO 98/47374), the combination further in view of Kryzysik (U.S. 6,440,437).

The combination of Straub and Farmer is discussed above, but does not teach the addition of a liporegulatory substance.

Kryzysik teaches an oil in water emulsion having 0.1 to 30% of a natural fat or oil (Claim 19) is useful for improving skin health (col. 3, lines 38-44). Suitable oils include fish oil<sup>1</sup>, linseed oil, rapeseed oil, and soybean oil (Col 7, line 54 – Col. 12, line 68 and claim 23). In some embodiments, the amount of oil is 1% (col. 17, lines 18-63).

Kryzysik does not teach xylitol, mannitol, rhamnose or fructooligosaccharides.

It would have been obvious to combine include the oils taught by Kryzysik to the topical matrix rendered obvious by Straub and Farmer, thereby creating a new matrix which useful for improving skin health.

**Claim 26** is rejected under 35 U.S.C. 103(a) as being unpatentable over Straub (U.S. 2002/0019431) in view of Farmer (WO 98/47374), the combination further in view of Mekideche (JP 2001-48776).

The combination of Straub and Farmer is discussed above, but does not teach the addition of the liporegulatory substance laminaria ochroleuca extract.

Mekideche teaches a cosmetic emulsion (claim 10) comprising an 1-40% extract of laminaria ochroleuca. The extract provides osmoprotectant and anti-radical effects.

Mekideche does not teach the addition of xylitol, mannitol, rhamnose or fructooligosaccharides.

It would have been obvious to modify the topical matrix rendered obvious by Straub and Farmer with the laminaria ochroleuca extract taught by Mekideche in order to add osmoprotectant effects and reduce radical effect in the topical matrix.

---

<sup>1</sup> Alaluf (U.S. 6,423,325) teaches that fish oils contain the acids recited in claim 30.

***Conclusion***

No claims allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ADAM MILLIGAN whose telephone number is (571)270-7674. The examiner can normally be reached on M-F 9:00-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fred Krass can be reached on (571)272-0580. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Frederick Krass/  
Supervisory Patent Examiner, Art Unit 1612

/A. M./  
Examiner, Art Unit 1612